

USSN 09/435,461

Page 2

rel. enzyme inherently has
10% greater absorbance

C1
Cmt

enzyme which, in a UV and/or MB assay having a control without the polyesterase enzyme, produces at least a 10% greater absorbance than an absorbance of the control, the treatment occurring prior to the application of a finish and for a time and under conditions to modify the properties of said polyester, wherein said modified properties of said treated polyester are selected from the group consisting of pilling, prilling prevention, weight, feel, appearance and luster properties of said polyester.

C2

4. (Amended) The method according to claim 2 wherein said polyester is a textile product and does not comprise a stain.

C3

6. (Twice amended) The method according to claim 1, wherein said polyesterase has at least 50% greater absorbance than an absorbance of a control without the polyesterase enzyme in a UV and/or a MB assay.

C4

7. (Three times amended) The method according to claim 6, wherein said polyesterase has at least 100% greater absorbance than an absorbance of a control without polyesterase enzyme in a UV and/or a MB assay.

C5

11. (Amended) The method according to claim 7, wherein said polyesterase is derived from *Absidia spp.*; *Acremonium spp.*; *Agaricus spp.*; *Anaeromyces spp.*; *Aspergillus spp.*; *Aeurobasidium spp.*; *Cephalosporum spp.*; *Chaetomium spp.*; *Coprinus spp.*; *Dactylium spp.*; *Fusarium spp.*; *Gliocladium spp.*; *Helminthosporum spp.*; *Humicola spp.*; *Mucor spp.*; *Neurospora spp.*; *Neocallimastix spp.*; *Orpinomyces spp.*; *Penicillium spp.*; *Phanerochaete spp.*; *Phlebia spp.*; *Piromyces spp.*; *Pseudomonas spp.*; *Rhizopus spp.*; *Schizophyllum spp.*; *Trametes spp.*; *Trichoderma spp.*; and *Ulocladium spp.*; *Zygorhynchus spp.*; *Bacillus spp.*; *Cellulomonas spp.*; *Clostridium spp.*; *Myceliphthora spp.*; *Thermomonospora spp.*; *Thermomyces spp.*; *Streptomyces spp.*; *Fibrobacter spp.*; *Candida spp.*; *Pichia spp.*; *Rhodotorula spp.*; or *Sporobolomyces spp.*

C6

12. (Twice Amended) A method for modifying the textile characteristics of a polyester article prior to the application of a finish to the article, comprising the steps of:

(a) obtaining a polyesterase enzyme, wherein said polyesterase enzyme has at least 10% greater absorbance than an absorbance of a control without polyesterase enzyme in an assay selected from a UV assay or a MB assay;

GC593AM

USSN 09/435,461

Page 3

C6
C7
C8

(b) contacting said polyesterase enzyme with said polyester article under conditions and for a time suitable for said polyesterase to produce a modified polyester article; and

(c) producing a modified polyester article.

21. (Amended) A method for enzymatically modifying the characteristics of an unsoiled aromatic polyester textile comprising, treating said polyester, prior to the application of a finish, with a polyesterase enzyme which produces in a UV and/or MB assay at least a 50% greater absorbance than an absorbance of a control without the polyesterase enzyme, the treatment for a time and under conditions to modify the textile properties of said polyester, wherein said modified textile properties of the treated polyester comprise the pilling, pilling prevention, weight, feel, appearance or luster properties of said polyester.

23. (Amended) A method for modifying the surface of an aromatic polyester resin, film, fiber, yarn or fabric comprising, (a) contacting said polyester prior to application of a finish with a polyesterase enzyme solution derived from a *Pseudomonas* spp, wherein said polyesterase enzyme has at least 50% greater absorbance in an assay selected from a UV assay and a MB assay compared to a similar assay without the use of said polyesterase enzyme, and (b) allowing said polyester to be modified, wherein said modified properties include the pilling, pilling prevention, weight, feel, appearance or luster of said polyester.

GC593AM